UGIC Board

Name	Position	Primary Sector	Term
Kevin Sato Cottonwood Heights	Chair	City	2008
Matt Jarman South Jordan City	Vice Chair	City	2010
Kevin Bell Salt Lake City	Treasurer	City	2009
Don Wood Wasatch County	Secretary	County	2009
Izabela Bresnan SDI	Member	Private	2009
Bert Granberg AGRC	Website	State	2009
David Henrie Utah County	Member	County	2010
Dr. Brandon Plewe, Phd Brigham Young University	Member	Higher Education	2008
Jeni Siebeneck West Valley City	Member	City	2008
Jeff Tucker ESRI	Member	Industry	2010
Dave Vincent USGS	Member	Federal	2009

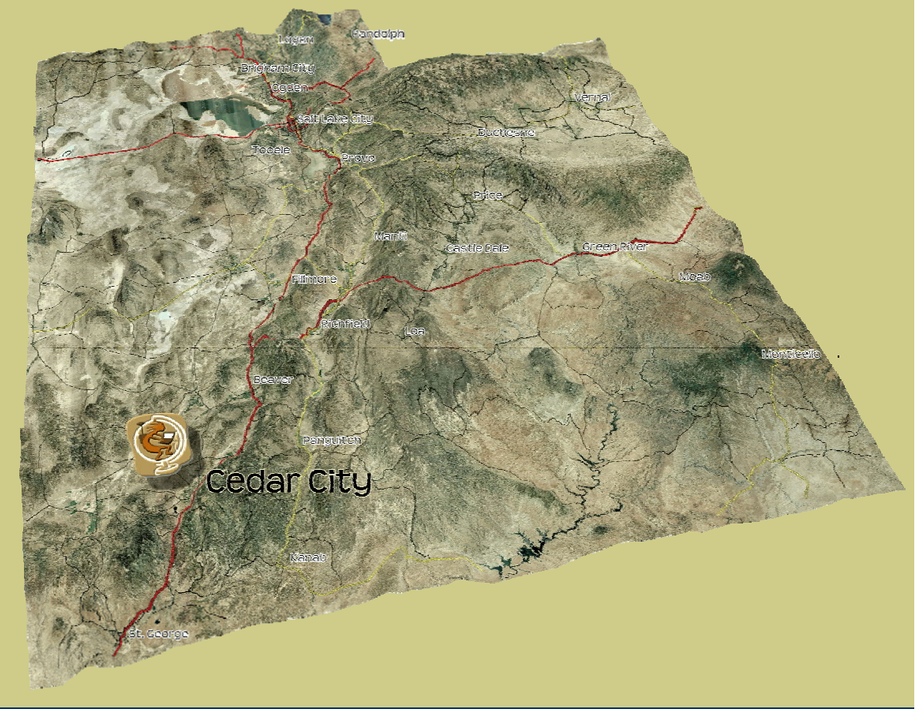
UGIC 2008

Thanks for making this year's conference a great success!

Utah Geographic Information Council

April 21-25, 2008 Cedar City, Utah

SEARCH ■ EXPLORE ■ FIND ■ DISCOVER



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Conference At A Glance

Monday - April 21, 2008 pre-conference 2 day technical training

	Meeting Room 2	Meeting Room 3	Meeting Room 7
7:30 am - 8:30 am			Breakfast
8:00 am - 5:00 pm	ESRI Introduction to ArcGIS II	Geodatabase Design Concepts	
10:00am - 10:30 am			Break
12:00 pm - 1:00 pm			Lunch
3:00 pm - 3:30 pm			Break

Tuesday - April 22, 2008 pre-conference 2 day technical training

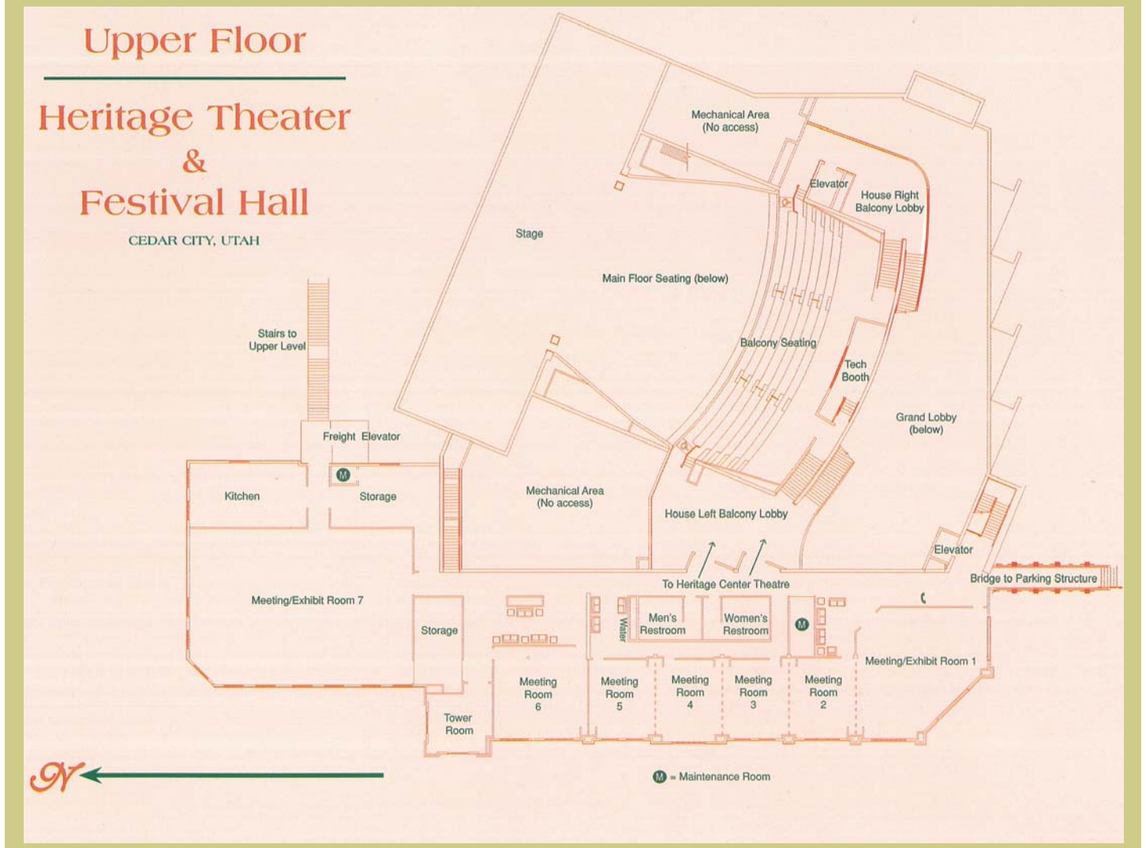
	Meeting Room 2	Meeting Room 3	Meeting Room 1
7:30 am - 8:30 am			Breakfast
8:00 am - 5:00 pm	ESRI Introduction to ArcGIS II	Geodatabase Design Concepts	
10:00am - 10:30 am			Break
12:00 pm - 1:00 pm			Lunch
3:00 pm - 3:30 pm			Break

Wednesday - April 23, 2008 UGIC Conference

	Activity	Rooms
7:30 am - 9:30 am	Breakfast	Grand Lobby
8:15 am - 9:45 am	Workshops	Fremont, Dominguez, Meeting Rooms 4, 5, & 6
9:45 am - 10:15 am	Break	Grand Lobby
10:15 am - 12:00 pm	Plenary Session	Heritage Theater
12:00 pm - 2:00 pm	Birds of Feather Lunch	Meeting Room 7
2:00 pm - 2:40 pm	Breakout Sessions	Fremont, Dominguez, Meeting Rooms 3, 4, 5, 6
2:40 pm - 3:30 pm	Breakout Sessions	Fremont, Dominguez, Meeting Rooms 3, 4, 5, 6
3:30 pm - 4:00 pm	Break	Grand Lobby
4:00 pm - 4:40 pm	Breakout Sessions	Fremont, Dominguez, Meeting Rooms 3, 4, 5, 6
5:00 pm - 7:00 pm	Vendor Social	Meeting Rooms 1, 2, 3, 4, 5

Venue Maps

Venue Maps



Conference At A Glance

Thursday - April 24, 2008 UGIC Conference

	Activity	Rooms
7:30 am - 9:30 am	Breakfast	Grand Lobby
8:15 am - 10:00 am	Workshops	Fremont, Dominguez, Meeting Rooms 4, 5, 6
8:30 pm - 5:00 pm	Vendor Area Open	Vendor Area - Meeting Rooms 1, 2
10:00 am - 10:30 am	Break	Vendor Area - Meeting Rooms 1, 2
10:30 am - 12:00 pm	Plenary Session	Heritage Theater
12:00 pm - 2:00 pm	Birds of Feather Lunch	Meeting Room 7
2:00 pm - 2:40 pm	Breakout Sessions	Fremont, Dominguez, Meeting Rooms 3, 4, 5, 6
2:40 pm - 3:30 pm	Breakout Sessions	Fremont, Dominguez, Meeting Rooms 3, 4, 5, 6
3:30 pm - 4:00 pm	Break	Vendor Area - Meeting Rooms 1, 2
4:00 pm - 4:40 pm	Breakout Sessions	Fremont, Dominguez, Meeting Rooms 3, 4, 5, 6

Friday - April 25, 2008 UGIC Conference

	Activity	Rooms
7:30 am - 9:30 am	Breakfast	Grand Lobby
8:15 am - 10:00 am	Workshops	Fremont, Dominguez, Meeting Rooms 4, 5, 6
8:30 pm - 11:10 am	Vendor Area Open	Vendor Area - Meeting Rooms 1, 2
10:00 am - 10:30 am	Break	Vendor Area - Meeting Rooms 1, 2
10:30 am - 12:00 pm	Breakout Sessions	Fremont, Dominguez, Meeting Rooms 3, 4, 5, 6
12:00 pm - 2:00 pm	Conference Lunch & Awards	Meeting Room 7

Plenary Schedule

Wednesday - April 23, 2008 Heritage Hall

	Activity	Speaker	Organization
10:15 am	Welcome & Introduction	Kevin Sato	Cottonwood Heights City/UGIC Chair
10:20 am	Utah GIS Portal	Bert Granberg	AGRC
10:30 am	Keynote Speaker	Scott Wheeler	Ride With Respect
11:00 am	Keynote Speaker	Karen Siderelis	USGS

Thursday - April 24, 2008 Heritage Hall

	Activity	Speaker	Organization
10:30 am	Conference Updates	Kevin Sato	Cottonwood Heights City/UGIC Chair
10:35 am	Utah Strategic Plan, Overview & Discussion	Dennis Gorham	AGRC

Keynote Speaker: Scott Wheeler

BLM National Volunteer Award Recipient

Scott Wheeler is a life long resident of Carbon County, Utah. About ten years ago a friend introduced Scott to a personal grade GPS unit he was intrigued with the technology and it quickly became a passionate hobby for him, although he considers himself an amateur when it comes to GIS.

Scott has received several awards for volunteerisms and in 2006 received a National Volunteer Award from the Bureau of Land Management for his efforts in producing a travel map of the San Rafael Swell Area.

He works part time as a consultant for Hydraulic Repairs Inc. and owns a Mini Storage Facility. He has been married almost 30 years has six children and two grandchildren. He is a board member of the Castle County Off Highway Vehicle organization and has a passion for off road motorcycles and enjoys mountain biking, hiking, camping, photography, flying, and working with the Boy Scouts.

Keynote Speaker: Karen Siderelis

Associate Director, Geospatial Information Office, USGS

Position: Associate Director for Geospatial Information and Chief Information Officer—as of March 2007, Ms. Siderelis is on a detail as Acting Chief Information Officer for the Department of the Interior. In her temporary absence, Kevin Gallagher will be Acting Associate Director for Geospatial Information and CIO for the USGS.

Responsibilities: Ms. Siderelis is responsible for creating agency strategies to provide innovative information management solutions, ensuring the integrity of USGS scientific information, and establishing USGS information policy to support its mission. She also provides leadership in coordinating USGS scientific information management with other Government agencies.

Career History and Highlights: Before Ms. Siderelis joined the USGS in her current role in November 2001, she served as director of the Center for Geographic Information and Analysis for the State of North Carolina. While in North Carolina, she managed the State's Geographic Information System service center and oversaw the development and maintenance of a statewide geographic database.

She has been a member and vice chair of the Mapping Science Committee of the National Academy of Sciences and has been president (1998-1999) and board member of the National States Geographic Information Council.

Education: Ms. Siderelis has a master's degree in park management and a bachelor's degree in education from the University in Georgia.

Notes

Notes

Vendor Exhibit Area

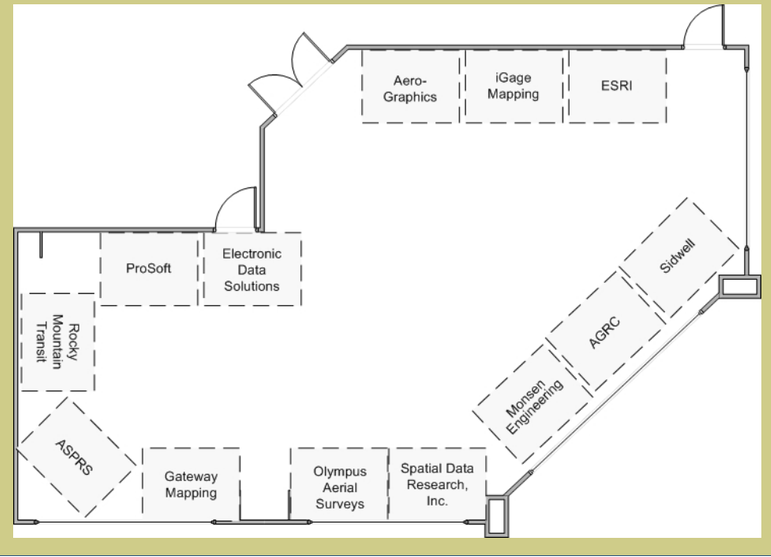
UGIC 2008 Vendors Exhibit Area Schedule

Wednesday April 23, 2008	Activity	Rooms
4:45 pm - 7:00 pm	Vendor Social	Meeting Rooms 1, 2, 3, 4, 5
Thursday April 24, 2008		
8:30 am - 5:00 pm	Vendor Area Open	Meeting Rooms 1, 2, 3, 4, 5
Friday April 25, 2008		
8:30 am - 11:10 am	Vendor Area Open	Meeting Rooms 1, 2, 3, 4, 5

UGIC 2008 Sponsoring Vendors

Aero-Graphics	Gateway Mapping	Rocky Mountain Transit
AGRC	Igage Mapping Corp.	Sidwell Company
ASPRS	Monsen Engineering	Spatial Data Research, Inc
Electronic Data Solutions	Olympus Aerial Surveys	
ESRI	Prosoft	

UGIC 2008 Vendor Area Layout - Meeting Rooms 1, 2



Technical Workshops

Wednesday - April 23, 2008 - 8:15 am –9:45 am

Workshop	Description	Room
ArcMaps Tips & Tricks I Instructor: Heather Paskevic, ESRI	The first part of this workshop focuses on general desktop tricks, data management with ArcGIS, editing, and cartography. This fast-paced workshop is designed for frequent ArcGIS desktop users who would like to get most out of ArcMap and ArcCatalog.	Fremont
Optimizing ArcGIS Server Map Services Instructor: Jeremiah Lindemann, ESRI	There are many factors that can impact the performance of your ArcGIS Server based web applications. This workshop will review some of the primary performance factors and describe best practices for optimizing your web application. Discussions on optimizing your .mxd before you publish will be discussed first, followed by creating and utilizing caching for quick performance.	Dominguez
VBA+ Geodatebase Instructor: Bert Granberg, AGRC	Visual Basic for Applications (VBA) is the most powerful language for writing custom code within ArcMap and ArcCatalog. This workshop will demonstrate the use of some simple VBA scripts that employ the Geodatabase ArcObjects to do things not easily done in the basic user interfaces. The overall goal is to introduce basic concepts and provide resources that get you up and running	Meeting Rooms 4,5
Network Analysis Instructor: Matt Jarman, South Jordan City	This workshop will demonstrate ArcGIS Network Analyst, a powerful extension that provides network-based spatial analysis including routing, travel directions, closest facility, and service area analysis. Industries that benefit from ArcGIS Network Analyst include transportation, logistics, health care, public safety, education, utilities, local government, business, and many more.	Meeting Room 6

Thursday - April 24, 2008 - 8:30 am –10:00 am

Workshop	Description	Room
ArcMaps Tips & Tricks I Instructor: Heather Paskevic, ESRI	The first part of this workshop focuses on general desktop tricks, data management with ArcGIS, editing, and cartography. This fast-paced workshop is designed for frequent ArcGIS desktop users who would like to get most out of ArcMap and ArcCatalog.	Fremont
ArcMap Tips and Tricks II Instructor: Jeremiah Lindemann, ESRI	The second part of this two-part series covers the advanced desktop topics of geoprocessing, extending the desktop using VBA, and utilizing developer samples and web-based resources. A basic understanding of geoprocessing with ArcToolbox tools would be helpful. The last half is intended for non-developers who want to make use of additional functionality or would like to see where customization takes place to start learning programming with ArcGIS Desktop. Attendees who are only interested in the aforementioned topics could attend this session without attending ArcMap Tips and Tricks I.	Dominguez

Notes

User Breakout Abstracts

Title: **GIS Data and Resources**
Presenters: Robert LeClair, ESRI - Denver
Description: This is an ArcView-level workshop to provide an overview of digital data, data types and formats, issues, and where and how to find data. The presentation and exercise will both focus on data that comes with the software. In the exercise, participants will create a map with data from the ESRI Data & Maps CDs, and (perhaps) downloaded from a website. There will also be a brief tour of the Geography Network, and a Website or data clearinghouse.

Title: **Introduction to Topology**
Presenters: Robert LeClair, ESRI - Denver
Description: GIS analysis is totally dependent on good quality data. Without data that is coincident and connected, many types of analysis from Networks to Overlay simply don't work or give unexpected results. This workshop will introduce you to the fundamentals of Topology in the Geodatabase and how you can effectively deploy and use the topology tools in ArcGIS to ensure you are creating and maintaining good quality data. You will also be introduced to the topology editing tools and how these can be incorporated into your day to day workflow.

Title: **The Future of NAIP**
Presenters: Kent Williams, USDA APFO
Description: Since 2003, The National Agricultural Imagery Program has provided the USDA Farm Service Agency (FSA) and cost share partners a means of acquiring low cost digital ortho imagery that is delivered within 30 days of acquisition. For 2008, several changes in the program are being made, including transitioning to a 3 year acquisition cycle, and collecting only 1 meter resolution imagery. Cost share opportunities include expanding coverage beyond the agricultural land that is the basis of FSA requirements, and "buying up" to a multi-spectral, or "4 band" product.

Title: **A Top Ten Issues Briefing; GIS Opportunities and Coordination Issues**
Presenters: Dennis Goreham, AGRC
Description: There will be speakers on various topics of interest to the Utah GIS community. Topics will include: emerging national standards, future of the National Agriculture Imagery Program (NAIP), municipal boundary update initiative, The Federal Lands Asset Inventory Reform (FLAIR) Act, IS Professional certification, Census programs, The National Geospatial Programs Office, Date Preservation and Archive Initiative, Renewable Energy data, ….

Title: **Maplex Getting Started & Google SketcUp: Implementation of 3D modeling in GIS**
Presenters: Paul G Damron & Kyle Beckstrand (Southern Utah University)
Description: Two short presentations will be held in this room.Maplex: Getting Started
Show individuals how to get started using this unique labeling feature ESRI provides with ArcMap. A short presentation on different ways to use Maplex by stepping through key features within the Maplex extension.

Google SketchUp: Implementation of 3D modeling in GIS.
3D-Modeling with Google SketchUp. These models can then be displayed in the ArcScene environment to create spatially correct 3D models. The presentation will focus on how these programs can work together to create lifelike structures, and then place them in a GIS environment. Presentation will center on an SUU campus model that I am currently working on for my Senior GIS Capstone project.

Title: **Salt Lake Community College Gets In Step with GIS**
Presenters: Dorleen Jensen, Salt Lake Community College
Description: The Salt lake Community College GeoScience/GIS Department would like to take this opportunity to acquaint you with its accomplishments and goals in GIS.
Examples of student projects will demonstrate the breadth of GIS application and potential in the education community.

Discussion will invite participation pertaining to the role of SLCC with the GIS professional community as we strive to prepare students for the work force, thus defining and refining the mutual roles of the college and the community.

Technical Workshops

Thursday - April 24, 2008 - 8:30 am –10:00 am

Workshop	Description	Room
Python I: Language Basics Instructor: Kevin Bell, SLC	This workshop will give non-programmers a look at the basic forms of Python scripting, including control-flow logic, variables, data structures, statements, operators, and modules. Attendees will follow along with examples that will get them started with this free, open-source language that is being embraced by the GIS community. Keep in mind that this session will not touch upon GIS work, but is intended as an overview of the language.	Meeting Rooms 4,5
Publishing GIS to Google Earth Instructor: Dr. Brandon Plewe, BYU	Google Maps and Google Earth (and other geobrowsers) provide a great opportunity to publish geographic information online without the expense and time of building your own server. We will discuss some of the different geobrowsers out there, introduce the KML format, and look at several programs for converting GIS data to KML and other formats. If you have tried this before, we would be happy to hear your experiences. Laptops will not be provided, but if you bring your own laptop with GIS and data, there will be some opportunities to try things out in the work-	Meeting Room 6

Friday - April 25, 2008 - 8:30 am –10:00 am

Workshop	Description	Room
ArcMap Tips and Tricks II Instructor: Jeremiah Lindemann, ESRI	The second part of this two-part series covers the advanced desktop topics of geoprocessing, extending the desktop using VBA, and utilizing developer samples and web-based resources. A basic understanding of geoprocessing with ArcToolbox tools would be helpful. The last half is intended for non-developers who want to make use of additional functionality or would like to see where customization takes place to start learning programming with ArcGIS Desktop. Attendees who are only interested in the aforementioned topics could attend this session without attending ArcMap Tips and Tricks I.	Fremont
Working with Spatial Data Instructor: Heather Paskevic, ESRI	This introductory level workshop will review some available sources of public GIS data and describe the workflow and challenges involved in bringing that data into your ArcGIS Desktop project. This workshop is designed for users who are relatively new to working with ArcGIS Desktop or who haven't worked with public data sources.	Dominguez
VBA+ Geodatebase Instructor: Bert Granberg, AGRC	Visual Basic for Applications (VBA) is the most powerful language for writing custom code within ArcMap and ArcCatalog. This workshop will demonstrate the use of some simple VBA scripts that employ the Geodatabase ArcObjects to do things not easily done in the basic user interfaces. The overall goal is to introduce basic concepts and provide resources that get you up and running with VBA.	Meeting Rooms 4,5
Python II: Pairing with ArcGIS Instructor: Kevin Bell, SLC	Now that you've seen the language in action, we'll apply it to GIS work. This workshop is meant to whet your appetite for ESRI's 2 day class "Introduction To Geoprocessing Scripts Using Python." Topics will include accessing ArcGIS tools and batch processing, interpreting the Geoprocessor Object Model, and an overview of the strengths and weakness of python compared to other	Meeting Room 6

User Breakout Sessions

Wednesday - April 23, 2008

	Fremont	Dominguez	Meeting Room 3	Meeting Room	Meeting Room 6
2:00 pm - 2:40 pm	Building and Publishing Geoprocessing Models with ArcGIS Server (Jeremiah Lindemann)	Building a Web-Based GIS and Work Order System - One District's Perspective (Richard King, PE)	Selecting the Best Imagery for Your Company (Anne Marie Neilson)	National Geodetic Survey – a Geodetic Update (Bill Stone)	Parcel Genealogy – How to Trace a Parcel's Lineage (Van O'Brien)
2:50 pm - 3:30 pm	Cadastral Information Management (Heather Paskevic)	The National Grid (Talbot J. Brooks)	Setting up Centerlines for Geocoding (Roger Dunn)	Rapid Response Team (Jeannie Watanabe)	Line-of-Sight Visualization Strategies (Dr. Jed Marti)
4:00 pm - 4:40 pm	Programmatically creating your own web service with ArcGIS Server (Jeremiah Lindemann)	Challenges to Modeling the Real World in a Cadastral GIS (Van O'Brien)	City of Ogden – Law Enforcement Executive Dashboard (Jeff Tucker, ESRI)	PANEL - Learning to use LiDAR Data (Jeannie Watanabe)	Spatial IM – A New Extension for ArcGIS (Andy Aston & Kasey Hansen)

Thursday - April 24, 2008

	Fremont	Dominguez	Meeting Room 3	Meeting Room 4,5	Meeting Room 6
1:30 pm - 2:10 pm	Geocoding (Heather Paskevic)	ArcGIS Server Showcase (Steve Gourley)	Using TURNGPS for Real Time GIS Collection and Navigation (Sean Fernández & Tom Wussow)	Public Involvement and GIS (Thomas McMurtry)	Vacant Land Analysis (Matt Jarman)
2:20 pm - 3:00 pm	Where To Next? GIS-based Web Applications & Services (Matt Peters & Steve Gourley)	Making Labels Work for You in ArcMap (Andrea Douglass)	Using GIS For NPDES Phase II Stormwater Compliance (Steven R. Johnson & Kasey Hansen)	GIS for Utility Notification in Utah (James Wingate)	Rethinking GIS Education, What should We Teach? (Brandon Plewe)
3:30 pm - 4:10 pm	Sneak peak at the ArcGIS Server 9.3 JavaScript and REST APIs. (Jeremiah Lindemann)	Automating Natural Resources Inventory Tool (Ryan Pierce)	Local GIS Planning (Michael Terner)	Discussion on the pros and cons of using Latitude and Longitude for official situs addresses (Ben Clement)	GIS Management (Isn't Knowing where it is at, Enough?) (Don Wood)

Friday - April 25, 2008

	Fremont	Dominguez	Meeting Room 3	Meeting Room	Meeting Room 6
8:30 am - 10:00 am			Utah Geospatial Infrastructure Roundtable (Brandon Plewe)		
10:30 am - 11:10 am	MAF/TIGER Modernization and Census 2010 (Jim Castagneri)	GIS Portal (Steve Gourley & Bert Granberg)	GIS Data and Resources (Robert LeClair)	The Future of NAIP (Kent Williams)	Maplex: Getting Started & Google SketchUp: Implementation of 3D modeling in GIS.
11:20 am - 12:00 pm	Recently Acquired Pictometry (Jerom Zenger)	GIS for the Uninitiated (Ben Clement)	Introduction to Topology (Robert LeClair)	A Top Ten Issues Briefing; GIS Opportunities and Coordination Issues (Dennis Goreham)	Salt Lake Community College **G**ets **I**n **S**tep with GIS (Dorleen Jenson)

User Breakout Abstracts

Title: **GIS Management (Isn't knowing where it's at enough?)**
Presenters: Don Wood Wasatch County
Description: What is the difference between being a GIS practitioner and being a GIS manager? While many of us have been taught how to be effective as GIS practitioners what do we know about how to manage a GIS operation? Managing a GIS operation is much more than just overseeing geospatial data and output generation. It involves working with the IT managers budget officers and the organization's management not to mention serving our customers. This presentation will discuss ideas about how to effectively manage a GIS operation as well as provide a forum for willing participants to share their ideas and experiences.

Title: **Utah Geospatial Infrastructure Roundtable**
Presenters: GISAC Strategic Planning Steering Committee
Description: This will be an open forum to discuss the draft strategic plan for the Utah Geospatial Infrastructure and provide your input into this roadmap for the future of GIS in Utah. Special attention will be given to the roles that all members of the Utah geospatial community can play in making it happen

Title: **MAF/TIGER Modernization and Census 2010**
Presenters: James Castagneri, US Census Bureau
Description: The recent MAF/TIGER modernization effort at the US Census Bureau has resulted in a dramatic change in the positional accuracy of TIGER road data. How will this affect current and future participant programs such as the Local Update of Census Addresses, and the Census Tract Program? As more local governments move toward enterprise GIS, how can local officials be prepared to work with Census demographic and TIGER data? This session will discuss the future for the 2010 census and the benefits of utilizing the vast data provided by the nation's premier data collection agency.

Title: **Recently Acquired Pictometry**
Presenters: Jarom Zenger. Salt Lake County Assessor's Office
Description: Description: Everyone has seen ortho Images (straight Down) but have you explored the option of Oblique images? Or do you ask yourself, " do I even know what Oblique means"? See what it means as a representative from Salt Lake County shows off the newly acquired Oblique and Ortho Images of their county and the program EFS (Electronic Field Study) that makes it possible. Pictometry's EFS program allows you to overlay and query shape files and SDE layers for quick image analysis at all angles. Pictometry's images and Software have been in use in several counties throughout Utah for a couple of years now and Salt Lake County didn't want to be left behind and neither will you.

Title: **GIS Portal**
Presenters: Steve Gourley and Bert Granberg, AGRC
Description: This presentation will demonstrate some of the functionality contained in the Utah GIS Portal and, hopefully, convince everyone to increase their level of participation on the site. The portal was built by a partnership of AGRC, UGIC and GISAC and aims to be a 'one-stop shop' for Utah GIS information, data, and events for all members of the Utah GIS Community. We'll discuss thoughts on future direction for the portal and more importantly take questions and input from the audience.

Title: **GIS for the Uninitiated**
Presenters: Benjamin B Clement
Description: Find yourself asking questions like the following:
"I keep hearing about GIS but what is it really?"
"How do I get started?"
"Lots of folks are doing GIS but will it really help me?"
"I really need GIS but how can I afford it?"

Stop by for a beginner-friendly discussion of what GIS is, why you need it, and how to get started. We will look at resources that are available, skills you will need to learn, and mistakes that you really don't need to repeat as they have already been thoroughly tested. I will be saving a few minutes for your questions so please bring one or two. And don't worry, they will not be graded.

We will take a step back from the GIS trees to take a broad look at the GIS forest. Concepts will be illustrated with a program that is free for all to use. Discussions will take place in language that everyone can understand. And after a brief discussion of what GIS is, we will be focusing on how it can be of real value to you. After all, if GIS can't benefit you, why should you care about it?

User Breakout Abstracts

Title: **Using GIS for NPDES Phase II Stormwater Compliance**
Presentors: Steven Johnson, GISP & Kasey Hansen of Gateway Mapping
Description: The National Pollutant Discharge Elimination System Phase II rules have been a call to action for many municipalities to improve the quality of stormwater in their communities. This presentation will show how GIS has been used to assist the City of Orem, Utah in meeting all six NPDES minimum control measures (public education, public participation, illicit discharge detection and elimination, construction, post-construction and good housekeeping). In addition, GIS can be used as a central repository for all the data required by the EPA during an audit of a Municipal Separate Storm Sewer System.

Title: **Local GIS Planning**
Presenter: Michael Terner, Applied Geographics
Description: GIS Strategic Planning isn't just for the state & regional level. Needs assessment and implementation planning are critical to the success of GIS at the municipal, county, and local levels. This session will include a presentation and discussion on how to plan at the local level for more effective GIS.

Title: **Public Involvement and GIS**
Presenters: Thomas McMurtry
Description: GIS is a valuable tool to enhance public participation efforts. It allows stakeholders and the public at large to understand and discuss complex issues that result better informed decision making processes. With public participation required as part of many projects, the use of GIS as a technical tool is essential. This presentation will illustrate InterPlan's efforts to use GIS in the public involvement setting so that it is meaningful for consultants, stakeholders and individual members of the public.

Title: **GIS for Utility Notification in Utah**
Presenters: James Wingate, Blue Stakes of Utah
Description: Blue Stakes of Utah is the organization to "call before you dig" to get utility lines marked prior to excavating in Utah. Blue Stakes is a non-profit organization that acts as a communication link between excavators and 450+ member utility owners. Information about the excavation is captured and provided to the utility owners so they can mark their underground pipes and cables at the site to reduce the risk of them being damaged during the excavation. Over 370,000 requests to dig were received in 2007, which included everything from new housing construction to pipeline maintenance to oil & gas exploration. Blue Stakes uses a statewide base map to locate the excavation site and determine which utility owners have underground facilities in the area. In October 2007, Blue Stakes completed the transition from using GIS data purchased from a commercial vendor to data provided entirely by local, state, and federal GIS departments in Utah. If you are a data producer, you may be interested to see how your data is being used to help Blue Stakes provide utility notification services at its most efficient and accurate level to date.

Title: **Discussion on the pros and cons of using Latitude and Longitude for official situs addresses.**
Presenters: Benjamin B Clement
Description: There is growing support for using Latitude and Longitude for official situs addresses. When it comes to addresses, most people hold rather strong feelings on the topic although most do not have the benefit of years of experience with and understanding of the technical issues involved. Drop by and share in a discussion with your peers concerning ideas, experience, and opinions on a possible new addressing system from a perspective that is "inside" the industry. It should, at a minimum, prove to be entertaining.

Title: **Vacant Land Analysis**
Presenters: Matt Jarman, South Jordan City
Description: Undeveloped lands can provide valuable information to cities and counties. This information can be used to assess future growth potentials and model impact and other fees. This presentation will discuss simple ways to create and maintain a vacant land layer using your local GIS and some of the valuable information that can be gained from this analysis.

Title: **Rethinking GIS Education, What should we teach?**
Presenters: Brandon Plewe, PHD, BYU
Description: We are all aware of how rapidly technology changes, and how difficult it is to keep up with the skills necessary to be successful in a GIS career. This open forum will allow employers to discuss with college and university faculty what they would like to see from graduating GIS majors, now and in the future. Topics discussed could include technical GIS skills, IT (web, database) skills, business/interpersonal skills, as well as the intangibles. This is a chance to have an impact on future employees.

User Breakout Abstracts

Title: **Building and Publishing Geoprocessing Models with ArcGIS Server**
Presenters: Jeremiah Lindemann, ESRI Denver
Description: ArcGIS Desktop users can build workflows using ModelBuilder to help automate their work. These models can make use of hundreds of geoprocessing tools as well as custom tools. You can also take these models and publish them to ArcGIS Server as Geoprocessing services. These services can then be run by anyone via a variety of clients such as Web Mapping applications, ArcGIS Explorer or ArcGIS Desktop.

This presentation will give a very brief overview on how to publish Geoprocessing models as ArcGIS Server services. The basic workflow and knowledge needed to publish a model will be provided. Attendees should have familiarity with ArcToolbox and using Geoprocessing tools.

Title: **Cadastral Information Management**
Presenters: Heather Paskevic, ESRI Denver
Description: The Cadastral Editor is a solution built for surveyors and cadastral land management organizations that want a spatially accurate GIS. This presentation will introduce how to leverage the cadastral editor functionality to improve the accuracy of your data, improve the efficiency of your workflow, improve the spatial location of associated data layers, and integrate parcel data from electronic XML or CAD files.

Title: **Programmatically creating your own web service with ArcGIS Server**
Presenters: Jeremiah Lindemann, ESRI Denver
Description: ArcGIS Server provides the ability to create many services out of the box that you can deliver such as Map, Geocoding and Geoprocessing services. However, in many cases users or other developers may want to gather simple information that doesn't have a visual component. Often times these users are non-gis users that want geographic information, but need to rely on GIS to do the calculations. For example, if someone wants to enter an address, how can you give them back all associated attributes from your parcel fabric at that address? The person entering the address may need some simple attributes and may not necessarily need a map back. Creating these type of web services can increase your productivity by putting GIS in the hands of other developers that may request it.

This presentation will demonstrate how you can create your own web service that other developers can then use. The presentation will discuss programming in detail and is intended for developers who have worked with either the Web ADF or ArcObjects, however non-programmers are welcome to understand what can be done as many people don't recognize the power in creating your own web-services.

Title: **Building a Web Based GIS and Work Order System - One District's Perspective**
Presenters: Richard King, PE Caldwell Richards Sorensen, inc
Description: The Central Utah Water Conservancy District has recently begun an intense effort to develop its GIS system and the tools necessary which will allow users within the District to easily access its data. The District has created a webbased system which utilizes ArcGIS Server, ASP.NET, and MySQL. In addition to using the system as a way to view geographic data, this system also includes a work order tracking system which allows management to set up tasks that need to be completed. Another challenge the District has faced is the high volume of Blue Stakes marking requests that come in each day. This system automates the process of retrieving the request, creating a work order from it, and creating a map of the request, includes the locations of the District's infrastructure. In addition to the creation of this new system, the District has come up with an innovative strategy for creating and assigning asset IDs to each asset. This method works for all types of assets and provides a significant amount of information about each asset simply from the ID, which is important given the large amounts of assets the District owns. We will explain how the system was built, how the various pieces of technology interact, and will provide lessons learned.

Title: **The National Grid**
Presenters: Talbot J. Brooks
Description: Abstract yet to be submitted.

Title: **Challenges to Modeling the Real World in Cadastral GIS**
Presenters: Van O'brien, Sidwell Co.
Description: Data modeling in a cadastral GIS has always presented unique challenges in balancing the efficiencies of map maintenance against data that best represents the phenomena in the real world. This presentation will describe some of these challenges, like dealing with coincident boundaries, vertical parcel models (i.e. condominiums), COGO entry and dimensioning, and how to model your data and maintenance workflows to meet them head on. Van O'Brien from The Sidwell Company will also show examples from various counties across the country in how they address these issues. It is our hope that attendees look at common data modeling challenges with a new or different perspective.

User Breakout Abstracts

Title: **Selecting the Best Imagery for Your Company**
Presenters: Anne Marie Nielson, Olympus Aerial Surveys
Description: This workshop will help attendees be better informed when obtaining and using aerial imagery for GIS. Addressing common questions: What is orthophotography? What pixel size should be used? What accuracy do I need? Do I want my flight in the spring or fall? What else do I need to consider as I decide on the best imagery for my company?

Title: **Setting up Centerlines for Geocoding (and Ideas for Programmatically Improving Results)**
Presenters: Roger Dunn
Description: I have developed a standard methodology for setting up street centerlines for geocoding purposes. It's a standard that goes beyond a database schema. Come see what Orem is doing to achieve high-percentage address hits. If you are developing geocode data and/or software for your organization, then you'll benefit from these techniques that you really can implement in your projects.

Title: **City of Ogden – Law Enforcement Executive Dashboard**
Presenter: Jeff Tucker, Regional Sales Manager, ESRI Denver
ESRI and business partner, Universal Mind are currently developing a executive dashboard for the Ogden Police Dept. for crime analysis. The technology offers rich geospatial visualizations and processes via the Web. Universal Mind makes this a reality by providing product platforms and custom solutions using high-quality Internet technologies and ESRI's ArcGIS Server and ArcWeb Services.

Title: **National Geodetic Survey – a Geodetic Update**
Presenters: William Stone, NOAA/ National Geodetic Survey
Description: This presentation will discuss the status of geodetic products and services and the positioning infrastructure provided by NOAA's National Geodetic Survey (NGS). NGS' primary responsibility is to provide the National Spatial Reference System, which serves as the nationwide positional framework for geospatial and related data. Presentation topics will include the nationwide network of GPS Continuously Operating Reference Stations, the Online Positioning User Service, the 2007 NAD83 readjustment, as well as other geodetic data offerings and services available from NGS.

Title: **Rapid Response Team (GIS Corps) -- Be part of Creating the foundation for this team**
Presenters: Kevin Sato, Kate Smith and Jeannie Watanabe
Description: Learn how you can use your GIS skills as part of the team responding to an emergency. What are the basic requirements and how can you get involved. This is an opportunity to ask questions and exchange ideas.

Title: **Learning to Use LiDAR Data**
Presenters: Jeannie Watanabe, AGRC
Description: LiDAR data for significant areas in Utah has recently been acquired. This session will be introduced with a brief summary of what LiDAR is. Then a panel of presenters who have experience in using LiDAR will speak to the work they have done, the tools used and what they have learned about using LiDAR data. We hope this session will stimulate discussion and give you ideas on how LiDAR data might help you in your work.

Title: **Parcel Geneology How to Trace a Parcel's Lineage**
Presenters: Van O'brien, Sidwell Co.
Description: The process of tracing these parcel lineages has traditionally been a challenge. We'll demonstrate an approach that ties the process of tracking parcel genealogy into the established workflows of cadastral map maintenance in ArcGIS 9.2 and integrated with tax/CAMA workflows, for lineage update and retrieval. We will incorporate these workflows with spatial tools that allow for the recovery of historical parcel geometry from the versioned geodatabase in ArcGIS.

Title: **Line-of-Site Visualization Strategies**
Presenters: Dr. Jed Marti, Artis LLC
Description: Line-of-sight computations over terrain are important for computer simulation, and optimizing viewing sites and radio frequency communications. These tasks are important for homeland security, positioning sensor networks and analyzing GPS responses. This talk will examine the task and how best to visualize the results. We'll conclude with a demonstration using the new 2 meter LiDAR data from Utah's AGRC.

Title: **Spatial IM - A New Extension for ArcGIS**
Presenters: Andy Ashton and Kasey Hansen, Gateway Mapping Inc.
Description: As a very flexible and robust addition to the group of extensions available for ArcGIS, Spatial IM delivers the powerful ability to maintain history, automatic time based updates, multiple hotlinks, and automated field calculations with map features. Additionally, it easily synchronizes multiple editors and reduces error introduced in the data entry process.

Come see how this exciting tool is implemented in public works, asset management, planning, and project management applications. You will also see how you can more easily put the power of GIS into the hands of those you work with who are not GIS professionals.

User Breakout Abstracts

Title: **Geocoding**
Presenters: Heather Paskevic, ESRI Denver
Description: Geocoding is the process of assigning a location, usually in the form of Coordinate values, to an address by comparing the descriptive location elements in the address to those present in the reference material. This technical session will start by exploring the necessary components and
requirements of a successful geocoding workflow. This includes obtaining and standardizing reference data and address locators. Wrap up will include a brief introduction to creating and using geocoding services within web mapping applications.

Title:**Where To Next? GIS-based Web Applications & Services**
Presenters: Matt Peters and Steve Gourley, AGRC
Description: Internet map applications have come a long way in 10 years. Anybody remember when Mapquest, TerraServer, and Map Objects IMS first came on the scene in the late 90's? Well, put away your feather duster cause were going to skip the reminiscing altogether and focus on the technologies and strategies that are available today and in the coming years and how we can best put them to use.

Topics to be covered include map services, base map services, web map services (WMS), web feature services (WFS), data service and how all this can be leveraged by GIS and non-GIS users and developers. We'll discuss both commercial and open source based solutions.

Title: **Sneak peak at the ArcGIS Server 9.3 JavaScript and REST APIs**
Presenters: Jeremiah Lindemann, ESRI Denver
Description: ArcGIS Server 9.3 introduces new REST and JavaScript APIs that will dramatically simplify your development experience and enable you to quickly deliver fast and user-friendly mashup GIS Web applications.

This presentation will show by samples how easy it is to create a web application that utilizes the new APIs. Any person interested in serving their GIS data via the web is welcome to attend. A brief overview of the ArcGIS Server architecture will be presented before discussing the new APIs. Other enhancements at ArcGIS Server 9.3 will be briefly discussed toward the end of the discussion.

Title: **ArcGIS Server Showcase**
Presenters: Steve Gourley, AGRC
Description: This session will focus on a selection of ArcGIS Server applications and web services available; what AGRC has been working on, and what is available to the Utah GIS community. Applications shown will include spatial editing through a browser, spatial analysis, database population, role based security, and form generation. Available web services will be listed and demonstrated as well as talk

Title: **Making Labels Work for You in ArcMap**
Presenters: Andrea Douglas, Ogden City
Description: Labels are a critical part in effectively communicating the message of any map. Labels are also one of the most challenging and time consuming parts of the map making process. This session will focus on several techniques that will help save time and frustration when dynamically labeling features in ArcMap. Using both the standard labeling engine and Maplex, labeling techniques will be discussed including: using the labeling toolbar and the label manager, changing label properties, creating label classes, using labeling expressions and saving text symbols to styles. These tools allow for more control over the placement and appearance of labels, which will help produce a more visually appealing and useful map.

Title: **Automating Natural Resources Inventory Tool**
Presenters: Ryan Pierce, Natural Resources Conservation Service
Description: The USDA Natural Resources Conservation Service (NRCS) in Utah is in the process of developing a methodology for applying GIS technology in mapping resource concerns in order to generate natural resource inventory reports. These reports will be used in project funding rankings, conservation planning, state-level resource planning processes, goal-setting, coordination with other agencies, and other applications for resources data and maps. The inventory tool will be easy to use, will reduce time spent by employees on data collection, and will increase the accuracy of NRCS processes that use geodata.

Title: **TURNGPS for Real Time GIS Collection and Navigation**
Presenters: Sean A. Fernandez, AGRC and Tom Wussow, Monsen Engineering
Description: This presentation will consist of two parts. Sean will provide an update on the status of The Utah Reference Network Global Positioning System (TURNGPS). Topics will include status of funding for the build out and ongoing maintenance of the system, some of the obstacles discovered while building the network, how the network is currently being used, and the advantages for using RTK to collect and navigate to existing GIS features in the field. Sean will also briefly touch on State Cadastral activities, including the Statewide Parcel Layer and continued progress on improving PLSS data. The second part of the presentation, (Tom) will be focused on practical applications using the TURN GPS system including new hardware solutions that can take advantage of the TURN GPS services.